



PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): John W. Locher, et al.

Title: SINGLE CRYSTALS AND METHODS FOR FABRICATING SAME

Application No.: 10/820,468

Filed: April 8, 2004

Examiner: Stephen J. Stein

Group Art Unit: 1775

Atty. Docket No.: 1075-BI4324

MS AMENDMENT  
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PO Box 1450  
Alexandria, VA 22313-1450

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- ☒ Form(s) PTO/SB/08A and/or PTO/SB/08B or PTO/1449  
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to the Examiner's attention in the above-identified application. Citation of such information shall not be construed as:

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Elise K. Dougherty  
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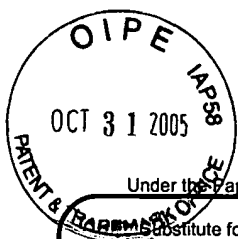
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Date 10/25/05

Respectfully submitted,

  
Jeffrey S. Abel, Reg. No. 36,079  
Attorney for Applicant(s)  
TOLER, LARSON & ABEL, L.L.P.  
5000 Plaza On The Lake, Suite 265  
Austin, Texas 78746  
(512) 327-5515 (phone)  
(512) 327-5452 (fax)



PTO/SB/08A (07-05)

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STATEMENT BY APPLICANT**

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|                        |                  |
|------------------------|------------------|
| Application Number     | 10/820,468       |
| Filing Date            | April 8, 2004    |
| First Named Inventor   | John W. Locher   |
| Art Unit               | 1775             |
| Examiner Name          | Stephen J. Stein |
| Attorney Docket Number | 1075-BI4324      |

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**U. S. PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                          | Publication Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|-----------------------|--------------------------|--|--------------------------------|--|---|
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                |  |   |
|                       | A1                       | US- 4,402,786                            | 09/06/1983                     | Little et al.                                      |   |
|                       | B1                       | US-                                      |                                |  |   |
|                       | C1                       | US-                                      |                                |  |   |
|                       | D1                       | US-                                      |                                |  |   |
|                       | E1                       | US-                                      |                                |  |   |
|                       | F1                       | US-                                      |                                |  |   |
|                       | G1                       | US-                                      |                                |  |   |
|                       | H1                       | US-                                      |                                |  |   |
|                       | I1                       | US-                                      |                                |  |   |
|                       | J1                       | US-                                      |                                |  |   |
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|                       | N1                       | US-                                      |                                |  |   |
|                       | O1                       | US-                                      |                                |  |   |
|                       | P1                       | US-                                      |                                |  |   |
|                       | Q1                       | US-                                      |                                |  |   |
|                       | R1                       | US-                                      |                                |  |   |
|                       | S1                       | US-                                      |                                |  |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication<br>Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
|-----------------------|--------------------------|---|-----------------------------------|--|---|----------------|
|                       |                          | Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known) |                                   |  |   |                |
|                       | T1                       | GB 2,044,630 A  | 10/22/1980                        | RCA Corporation                                    |   |                |
|                       | U1                       |   |                                   |  |   |                |
|                       | V1                       |   |                                   |  |   |                |
|                       | W1                       |   |                                   |  |   |                |
|                       | X1                       |   |                                   |  |   |                |
|                       | Y1                       |   |                                   |  |   |                |

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Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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| Examiner Name          | Stephen J. Stein |
| Attorney Docket Number | 1075-BI4324      |

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of

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**NON PATENT LITERATURE DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|--------------------|-----------------------|---|----------------|
|                    | A2                    | Locher, J.W. et al., "The Production of 225*325 mm Sapphire Windows for IR (1 to 5 mu x m) Applications", DATABASE INSPECTION ONLINE, Vol. 5078, no. 1, 2003, pgs 40-46. (ABSTRACT ONLY)  |                |
|                    | B2                    | Novak, R.E. et al., "The Production of EFG Sapphire Ribbon For Heteroepitaxial Silicon Substrates", JOURNAL OF CRYSTAL GROWTH, Vol. 50, 1980, pgs 143-150.  |                |
|                    | C2                    | Antonov, P.I. et al., "A Review of Developments in Shaped Crystal Growth of Sapphire By the Stepanov and Related Techniques", PROGRESS OF CRYSTAL GROWTH AND CHARACTERIZATION OF MATERIALS, pgs 63-122, 2002.   |                |
|                    | D2                    |   |                |
|                    | E2                    |   |                |
|                    | F2                    |   |                |
|                    | G2                    |   |                |
|                    | H2                    |   |                |
|                    | I2                    |   |                |
|                    | J2                    |   |                |

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<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

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